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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/800,516

03/15/2004

Brian D. Goers

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12/31/2008

3M INNOVATIVE PROPERTIES COMPANY

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ST. PAUL, MN 55133-3427

EXAMINER

RACHUBA, MAURINA T

ART UNIT

PAPER NUMBER

3727

NOTIFICATION DATE

DELIVERY MODE

12/31/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/800,516	Applicant(s) GOERS, BRIAN D.	
	Examiner Maurina Rachuba	Art Unit 3727	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 13-22 and 24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 23 and 25-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 16 October 2008 has been entered.

Election/Restrictions

2. Claims 13-22 and 24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 18 January 2005.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 32 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 32 depends from itself, and the scope of the claim cannot be readily determined. For purposes of examination, claim 32 is considered dependent from claim 31.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 23, and 25-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manfredi et al, 5,785,585 in view of Mitsui et al, 6,312,324. '585, see column 5, lines 1-4, 10-12 and 41-43, discloses the claimed invention, except for the plastic being a synthetic plastic; the abrasive particles being affixed with electroplated metal, the metal being nickel; or the carrier affixed to the bottom surface of the substrate by mechanical fasteners. Regarding the use of a synthetic plastic, in disclosing that a plastic may be used, it is the examiner's position that '585 discloses that any plastic, including synthetic plastics may be used. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided '585 with a synthetic plastic, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Regarding the use of electroplated metal, or nickel, '324 teaches that it is old and well known to make a conditioner which includes a carrier, and a substrate, the substrate including diamond abrasive in a nickel plating layer. It would have been obvious to one of ordinary skill in the art to have provided '585, that broadly discloses a metal to hold the diamond abrasive, with an electroplated metal or nickel, as taught by '324, as to select a known material on the basis of its suitability for the intended use as a matter of obvious design

choice. *In re Leshin*, 125 USPQ 416. Regarding the use of mechanical fasteners, the examiner takes Official notice as to the equivalency of adhesive and mechanical fasteners to attach one structure to another, and one of ordinary skill in the art would have considered it obvious to have provided '585 with mechanical fasteners to affix the substrate to the carrier.

6. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manfredi et al, 5,785,585 in view of Sung, 6,679,243. '585 does not disclose or teach the matrix material comprising a brazing alloy, which further comprises at least one of chromium, tungsten, cobalt, titanium, zinc, iron, manganese or silicon, or that the brazing alloy is aluminum, boron, carbon or silicon, with the abrasive is cubic boron nitride or aluminum oxide; or the disk comprising a corrosion resistant powder from 40% to 98% by weight of the matrix material.. '243, column 13, lines 36-39, teaches using a brazing alloy with diamond abrasive, the alloy containing chromium, manganese, or silicon as a carbide precursor, column 20, lines 31-48, the silicon carbide being corrosion resistant, and 50% by weight of the alloy. '243 further teaches that dependent on tool use, other abrasives, such as cubic boron nitride can be used. Because both references teach abrasive bonded to supports by a matrix, it would have been obvious to one of ordinary skill in the art to have substituted the materials taught by '243 for those of '585, for the predictable result of strongly bonding the abrasive to the support. It has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Regarding the use of aluminum oxide as an

abrasive, in the Office action of 15 April 2005, the examiner took Official notice that the use of aluminum oxide, an old and well known abrasive, would have been obvious to one of ordinary skill. Applicant did not traverse in the response filed 15 July 2005. In accordance with MPEP 2144.03, the use of aluminum oxide is therefore admitted as prior art.

Response to Arguments

7. Applicant's arguments with respect to claims 1-12, 23 and 25-32 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maurina Rachuba whose telephone number is 571 272 4493. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica Carter can be reached on 571 272 4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. Rachuba/
Primary Examiner, Art Unit 3727